

U.S. DEPARTMENT OF LABOR
WORKPLACE STANDARDS ADMINISTRATION
BUREAU OF LABOR STANDARDS
MATERIAL SAFETY DATA SHEET

FORM NO. OSHA-20 (MODIFIED)
MAY 1971

MDC CONTROL NO. **1956**
QPL

SECTION I: MATERIAL AND MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME CPR Division, The Upjohn Company		EMERGENCY TELEPHONE NO. (213) 320-3550
ADDRESS (NUMBER, STREET, CITY, STATE AND ZIP CODE) 555 Alaska Avenue, Torrance, California 90503		
CHEMICAL NAME AND SYNONYMS N-Ethyl Morpholine		TRADE NAME AND SYNONYMS (QPL 1956 Type 2 & 3) Isonate® CPR 2033C Component C
CHEMICAL FAMILY Tertiary amine	FORMULA C₆H₁₃NO	

SECTION II: HAZARDOUS INGREDIENTS*

PAINTS, PRESERVATIVES/SOLVENTS	%	TLV (UNITS)	ALLOYS AND METALLIC COATINGS	%	TLV (UNITS)
PIGMENTS			BASE METAL		
CATALYST N-Ethyl Morpholine	100	20	ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES*				%	TLV (UNITS)

SECTION III: PHYSICAL DATA

BOILING POINT (°F)	281	SPECIFIC GRAVITY (H ₂ O = 1)	0.91
VAPOR PRESSURE (mm Hg.) at 77°F.	5	PERCENT VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR = 1)	4	EVAPORATION RATE (Butyl Acetate = 1)	0.65
SOLUBILITY IN WATER	100%		

APPEARANCE AND ODOR **Colorless liquid. Ammoniacal odor**

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) 96°F. Tag open cup	FLAMMABLE LIMITS	LeI 1.0	Uel 9.8
EXTINGUISHING MEDIA Water, foam, CO₂, dry chemical			

SPECIAL FIRE FIGHTING PROCEDURES

Addition of water will reduce burning rate. Vapors irritating to eyes, nose and throat.

Firefighters should wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Thermal decomposition may produce nitrogen oxides and traces of HCN.

*PLEASE DO NOT USE GENERALIZATIONS, SUCH AS PETROLEUM HYDROCARBONS, ALCOHOL, KETONES.
USE SPECIFIC CHEMICAL NAMES, SUCH AS METHANOL, BENZENE, PERCHLOROETHYLENE.

SECTION IV: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

20 ppm.

EFFECTS OF OVEREXPOSURE

Vapors irritate nose and throat and may cause nausea. Liquid is severe eye irritant. Vapors may cause asymptotic transient fogging of cornea of the eye ("halo" vision).

EMERGENCY AND FIRST AID PROCEDURES

In case of skin or eye contact, immediately flush with copious quantities of clean water for at least 15 minutes. Obtain medical attention immediately for eyes. For inhalation, remove from contaminated area. If symptoms persist, obtain medical attention.

SECTION VI: REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Excessive heat, fires and hot surfaces

INCOMPATIBILITY (MATERIALS TO AVOID)

Strong acids

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition may produce nitrogen oxides, CO, CO₂ and traces of HCN.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	None

SECTION VII: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Flush heavily with water

WASTE DISPOSAL METHOD

Incinerate in a furnace.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

Self-contained breathing apparatus in confined areas.

VENTILATION	LOCAL EXHAUST Preferred	SPECIAL
	MECHANICAL (GENERAL) Acceptable	OTHER

PROTECTIVE GLOVES

Rubber or plastic. Recommended

EYE PROTECTION

Chemical goggles

OTHER PROTECTIVE EQUIPMENT

Eye bath and safety shower.

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in closed containers at 70-90°F. CAUTION! COMBUSTIBLE. LIQUID

MAY CAUSE EYE INJURY.

OTHER PRECAUTIONS

Keep away from heat, sparks and fire.

S. J. Assony, Ph. D.

19 December 1972

PREPARED BY

DATE

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